# STIBNITE/YELLOW PINE MINING AREA

IDAHO EPA ID# IDD980665459

Last Update: August, 2007

### EPA Region 10 Valley Stibnite

1st Congressional District Other Names: Stibnite Mine

## Site Description

The Stibnite/Yellow Pine Mining Area is about 14 miles east of the town of Yellow Pine in Valley County, Idaho, in the Payette National Forest. The site comprises a number of waste source areas resulting from mining along Meadow Creek and East Fork South Fork (EFSF) Salmon River. The site includes both National Forest Service lands and private lands, although most of the mining and processing areas, both historic and current, are on patented (private) claims.

Mining and milling of gold-antimony ore was begun in the 1930s. During World War II the mining area gained significance as the largest producer of strategic metals, specifically antimony and tungsten, which had many wartime uses. A smelter was constructed at Stibnite in 1948 to refine concentrates from the mill.

Exploration of gold reserves in the area resumed in 1970, and from 1979 through 1991 the Canadian Superior Mining (CSM) Company constructed and operated a successful cyanide heap-leaching process to recover gold from low-grade ore. Later owners included the Superior Mining Company, Mobil Oil Corporation, Pioneer Metals, Pegasus Gold Inc., and Stibnite Mine Inc. (SMI). Hecla Mining Corporation (Hecla) also conducted cyanide heap-leaching on properties formerly owned by Bradley Mining Company adjacent to SMI of historic stockpiled ore and new workings for supplemental ore.

Mining-related disturbances in Meadow Creek and EFSF Salmon River that are discrete source areas of potential contaminants include the Bradley tailings (main deposition area), smelter process area and wastes, process ponds, 5 heap-leach pads, and an open-pit mine. Contaminants associated with these source areas include heavy metals and cyanide in area soil, groundwater, seeps, and sediments.

In October 1991, the U.S. Fish and Wildlife Service documented a release of arsenic (6.38 parts per million) in steelhead trout taken from EFSF Salmon River below Sugar Creek, which exceeds the cancer risk and reference dose levels. In June, 1993, the Forest Service collected soil, sediment, surface water, and groundwater samples at 33 locations from above the Bradley tailings to Sugar Creek and arsenic was detected in all sampled media.

**Site Responsibility:** This site is being addressed through actions by the US Forest Service and State of Idaho.

NPL Listing History	Dates
Proposed Date: Removed Date: Withdrawal Date: Final Date: Deleted Date:	09/13/2001

## Threats and Contaminants

#### Media Affected: Surface Water, Environmentally Sensitive Area

Mining and milling of gold, antimony and tungsten have taken place on site since about 1927, resulting in enormous tailing and spent ore piles along Meadow Creek. Toxic metals from this waste material are contaminating the creek, including antimony, arsenic, cadmium, copper, mercury, nickel and lead.

Concentrations of contaminants exceeding EPA freshwater chronic water quality criteria were detected in surface water samples collected from four sampling stations on Meadow Creek below the Keyway dam, Meadow Creek above its confluence with the EFSF Salmon River, EFSF Salmon River below its confluence with Meadow Creek, and EFSF Salmon River above its confluence with Sugar Creek. The Bradley tailings are in the upper Meadow Creek channel, with the creek diverted around the tailings. Meadow Creek joins the EFSF Salmon River about 0.9 mile downstream of the Bradley tailings. Concentrations of metals exceeding three times background were detected in sediment samples also collected from the same four sampling stations.

## Cleanup Progress

The State did not concur with the listing. Idaho's Dept. of Environmental Quality is attempting the cleanup on its own.

## Regional Contacts

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#### Information pertaining to this site is housed at the following location(s):

EPA Region 10 Superfund Records Center 1200 Sixth Avenue, ECL-076 Seattle, WA 98101